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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,683	02/22/2005	Heniz W. Lorig	SHEE 2 00050	9510

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EXAMINER
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YAN, REN LUO

ART UNIT	PAPER NUMBER
2854	

MAIL DATE	DELIVERY MODE
05/02/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/525,683

Applicant(s)

LORIG ET AL.

Examiner

Ren L. Yan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 23-47 is/are pending in the application.
- 4a) Of the above claim(s) 45-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23,24,28-32,37 and 41-44 is/are rejected.
- 7) ☒ Claim(s) 25-27,33-36 and 38-40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2-22-2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Applicant's election of Group I, claims 23-44 in the reply filed on 2-27-2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 23, 24, 37 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Smoot et al(6,640,711).

Regarding claim 23, the patent to Smoot et al teaches the structure of a sleeve with multiple layer construction for printing presses having king rolls designed as air cylinders, the sleeve comprising an inner tube 12 of reversibly expandable plastic material, an inner diameter of which is smaller than an outer diameter of the king roll; an elastic, compressible intermediate layer 18 that accommodates radial expansion of the inner tube during mounting or dismounting of the sleeve; an outer layer 14; and a support structure 23 integrated into the sleeve construction between the inner tube and the outer layer, which completely penetrates the compressible

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intermediate layer in at least one location in a radial direction and stabilizes the outer layer relative to the inner tube in a circumferential direction and/or the radial direction. See Figs. 2-7 in Smoot et al for details.

Regarding claim 24, Smoot et al teach wherein the support structure 23 comprises radial struts distributed circumferentially in a symmetrical manner.

Regarding claim 37, Smoot et al teach wherein the radial struts of the support structure are formed at a distance from both end faces of the sleeve.

Regarding claim 41, Smoot et al teach wherein the sleeve is an adapter sleeve on which a printing sleeve or similar can be installed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smoot et al in view of Smoot et al in view of Knauer et al(6,148,725).

Regarding claims 28-30, Smoot et al teach all that is claimed except for a transition layer provided between the outer layer and the compressible layer. Knauer et al teaches in a sleeve for a printing cylinder including an inner layer 18, a compressible layer 4, an outer layer 6, wherein a transition layer of single ply or multiple ply plastic material of low density is provided between the outer layer and the compressible layer. See Fig. 1 and column 3, lines 27-37 in Knauer et al for example. It would have been obvious to one of ordinary skill in the art at the time of

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invention to provide the sleeve of Smoot et al with the transition layer appropriately disposed between the outer layer and the compressible layer as taught by Knauer et al as an reinforcement to the overall sleeve construction. Regarding claim 29, Smoot et al and Knauer et al teach the outer layer comprises a plastic material of low density. Regarding claim 30, Smoot et al and Knauer et al teach the transition layer and/or the outer layer comprises a material that can be cast or foamed.

Regarding claim 31, Smoot et al and Knauer et al teach all that is claimed except that the support structure comprises the same material as the material of the transition layer or the material of a bottom-most ply of the transition layer. It has been held by the Court that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). Accordingly, it would have been obvious to one of ordinary skill in the art to choose the same material for the support structure of Smoot et al and Knauer et al as the transition layer in order to achieve the desired operability of the sleeve.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smoot et al.

Regarding claim 32, Smoot et al teach all that is claimed except for the radial struts comprise the same material as the outer layer and are formed during casting or introducing of the outer layer. It has been held by the Court that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). Accordingly, it would have been obvious to one of ordinary skill in the art to choose the same material for the radial struts of Smoot et al as the outer layer in order to achieve the desired operability of the sleeve.

Claims 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smoot et al in view of Lorig et al(6,745,692).

Regarding claim 42, Smoot et al teach all that is claimed except for the sleeve having a conductive or diverting outer layer or surface coating, and an electroconductive or diverting element, which connects an outer layer or surface coating at an inner circumference of the inner tube with an outer wall of the king roll for diverting electrostatic charges into the king roll. Lorig et al teach a sleeve for a printing cylinder that has a conductive or diverting outer layer or surface coating, and an electroconductive or diverting element, which connects an outer layer or surface coating at an inner circumference of the inner tube with an outer wall of the king roll for diverting electrostatic charges into the king roll. See Figs. 1-3 in Lorig et al for example. It would have been obvious to one of ordinary skill in the art at the time of invention to provide the sleeve with electrostatic charge diverting structure appropriately disposed as taught by Lorig et al in order to divert the undesirable electrostatic charge build up on the sleeve surface.

Regarding claim 43, Smoot et al and Lorig et al teach wherein the element comprises a variable length in the radial direction.

Regarding claim 44, Smoot et al and Lorig et al teach wherein the element is integrated into the support structure.

Claims 25-27, 33-36 and 38-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an Examiner's statement indicating allowable subject matter:

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Regarding claim 25, the prior art of record fails to teach the structure of a sleeve as claimed including particularly wherein the compressible layer is intermitted by radial holes and the support structure is provided in the radial holes and partially bridges the compressible layer.

Regarding claim 26, the prior art of record fails to teach the structure of a sleeve as claimed including particularly wherein the support structure includes rings concentrically surrounding the inner tube.

Regarding claim 38, the prior art of record fails to teach the structure of a sleeve as claimed including particularly wherein at least one partial depression is formed on an inner circumference of the inner tube.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ren L Yan  
Primary Examiner  
Art Unit 2854

Ren Yan  
April 28, 2007